

IN THE CLAIMS

1. (previously presented) An abrasive electrolyte solution adapted for thinning a layer on a substrate without contaminating the substrate, the abrasive electrolyte solution comprising:
 - an electrically conductive fluid that is substantially free of materials that are reactive within a desired operating voltage potential range and substantially free of materials that inhibit desired reactions within the desired operating voltage potential range,
 - the electrically conductive fluid being chemically abrasive to the layer on the substrate, and
5. 10. abrasive particles having a size that is small enough for the particles to substantially remain in suspension in the electrically conductive fluid and is large enough for the particles to provide a desired degree of erosion of the layer on the substrate when the abrasive electrolyte solution is forced against the layer on the substrate.
2. (original) The abrasive electrolyte solution of claim 1, wherein the substrate is a semiconducting substrate including integrated circuits.
3. (original) The abrasive electrolyte solution of claim 1, wherein the layer comprises a first electrically conductive layer, an underlying non electrically conductive barrier layer, and an intervening electrically conductive seed layer.
4. (original) The abrasive electrolyte solution of claim 1, wherein the layer comprises copper.
5. (original) The abrasive electrolyte solution of claim 1, wherein the size of the abrasive particles is between about fifty nanometers and about two hundred and fifty nanometers.
6. (original) The abrasive electrolyte solution of claim 1, wherein the desired operating voltage potential range of the abrasive electrolyte solution is between about one tenth of a volt and about one hundred volts.

7. (original) The abrasive electrolyte solution of claim 1, wherein the desired reactions comprise oxidation of the layer on the substrate, where the layer is electrically conductive.
8. (original) The abrasive electrolyte solution of claim 1, wherein the desired reactions comprise oxidation of the layer on the substrate, where the layer is copper.
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